U.S. Tidal Predictions - v3

Domain Portfolio: Lifestyle | Domain: Marine | Usage Classification: Standard

Geography: U.S. & Caribbean **Attribution Required:** NO **Attribution Requirements:** N/A

Overview

The U.S. Tides API returns marine tide predictions for coastal locations in the United States and its territories. The tidal predictions are generated from harmonic or subordinate tide station/locations. Harmonic locations (also known as reference sites) are generated by regular water level reading sites. Subordinate location predictions derived by applying corrections to a reference tide station. Data is available for the date range of 12 months prior to present date and up to 12 months into the future. Data will not be returned for locations over 60 miles from the coastline.

HTTP Headers and Data Lifetime - Caching and Expiration

For details on appropriate header values as well as caching and expiration definitions, please see **The Weather Company Data | API Common Usage Guide**.

Atomic Endpoints	Aggregate Product Names
v3/wx/forecast/tides/daily/3day	v3-wx-forecast-tides-daily-3day
v3/wx/forecast/tides/daily/5day	v3-wx-forecast-tides-daily-5day
v3/wx/forecast/tides/daily/10day	v3-wx-forecast-tides-daily-10day
v3/wx/forecast/tides/daily/15day	v3-wx-forecast-tides-daily-15day
v3/wx/forecast/tides/monthly	v3-wx-forecast-tides-monthly

URL Construction

Request by Tidal Station ID: Required Parameters: tide(s), units, format, startDay (not used with 'monthly' endpoint), startMonth, startYear, apiKey
https://api.weather.com/v3/wx/forecast/**tides/daily/3day?tide=8670870**&units=e&format=json&**startDay=01&startMonth=10&startYear=2018&apiKey=yourApiKey**
Request by Geocode: Required Parameters: geocode(s), units, format, startDay (not used with 'monthly' endpoint), startMonth, startYear, apiKey
https://api.weather.com/v3/wx/forecast/**tides/daily/3day?geocode=30.39,-86.49**&units=e&format=json&**startDay=01&startMonth=10&startYear=2018&apiKey=yourApiKey**
Request by IATA Code: Required Parameters: iataCode, units, format, startDay (not used with 'monthly' endpoint), startMonth, startYear, apiKey
https://api.weather.com/v3/wx/forecast/**tides/daily/3day?iataCode=SFO**&units=e&format=json&**startDay=01&startMonth=10&startYear=2018&apiKey=yourApiKey**
Request by ICAO Code: Required Parameters: icaoCode, units, format, startDay (not used with 'monthly' endpoint), startMonth, startYear, apiKey
https://api.weather.com/v3/wx/forecast/**tides/daily/3day?icaoCode=KLGA**&units=e&format=json&**startDay=01&startMonth=10&startYear=2018&apiKey=yourApiKey**
Request by Place ID: Required Parameters: placeid, units, format, startDay (not used with 'monthly' endpoint), startMonth, startYear, apiKey
https://api.weather.com/v3/wx/forecast/**tides/daily/3day?placeid=dab51f120ae4ee6a0359298f849c29a710c09e4c6b28a45975c5557a21ed1153**&units=e&format=json&**startDay=01&startMonth=10&startYear=2018&apiKey=yourApiKey**

Request by Postal Key: Required Parameters: postalKey, units, format, startDay (not used with 'monthly' endpoint), startMonth, startYear, apiKey
https://api.weather.com/v3/wx/forecast/**tides/daily/3day?postalKey=94016:US**&units=e&format=json&**startDay=01&startMonth=10&startYear=2018&apiKey=yourApiKey**

Valid Parameter Definitions

Parameter Name	Valid Parameter Value	Description
tide	8670870, TEC2847	This field contains the unique tidal station ID. Appears as an integer or alphanumeric string.
startDay	any valid day of the monthly, range 01-31	any valid day of the month, range 01-31
startMonth	any valid month of the year, range 01-12	any valid month of the year, range 01-12
startYear	any valid year	any valid year

Data Elements & Definitions

Note: Field names are sorted alphabetically in the table below for presentation purposes. The table below does not represent the sort order of the API response.

Field Name	Description	Type	Range	Sample	Nulls Allowed
"tidalForecast"		Object			
adminDistrict	The internationalized identifier for 'state', 'province', or similar geopolitical area - level 1 administrative division.	string	Any valid US state code or International region identifier	Colorado	Y
adminDistrictCode	State, Region, District or Province code - identifier code for 'state', 'province' or similar geopolitical area - level 1 administrative division.	string	Any valid US state code or International region identifier	GA	N
countryCode	ISO country code of the location	string	Any valid ISO country code	US	N
latitude	Latitude of tidal station location.	decimal	Any valid latitude value. -90 to 90	-59.53	N
longitude	Longitude of tidal station location.	decimal	Any valid longitude value. -180 to 180	-113.13	N
stationId	This field contains the unique tidal station ID.	string	Any valid tide station ID, which can contain numbers and letters	8670870, TEC2847	N
tidalStationName	This field contains the presentation name of a tidal station.	string		Crown Point, Mission Bay, California	Y
tideHighAnnualMax	Max height of High Tide predicted for the annual period: in feet or meters	decimal	Feet or meters based on units parameter	7.6	Y
tideLowAnnualMin	Min height of Low Tide predicted for the annual period: in feet or meters	decimal	Feet or meters based on units parameter	1.6	Y
"tidalForecast"		Array			
tideHeight	The Height of the Tide at a particular time in the appropriate unit of measure (UOM) : feet or meters. Datum is derived from MLLW (Mean Lower Low Water)	[decimal]	Feet or meters based on units parameter	6	N

tideId	Tide ID reference number.	[integer]		413	Y
tideType	The type of the tide.	[string]	H=High, L=Low	H	N
validTimeLocal	Time of the Tide in the local time adjusted for Daylight Savings Time (DST)	[ISO]	YYYY-MM-DDTHH:MM:SS-NNNN; NNNN=GMT offset	2014-08-20T10:47:59-0500	N
validTimeUtc	Date/time of tide in Unix seconds [number of seconds that have elapsed since January 1, 1970 (midnight UTC/GMT), not counting leap seconds].	[epoch]		1369306800	N

JSON Sample


```
// Response Collapsed for Presentation Purposes
{
  "adminDistrict": "Florida",
  "adminDistrictCode": "FL",
  "countryCode": "US",
  "latitude": 30.4,
  "longitude": -86.51,
  "stationId": "8729511",
  "tidalStationName": "Destin / East Pass",
  "tideHighAnnualMax": 0,
  "tideLowAnnualMin": 0,
  "tidalForecast": {
    "predictionType": [
      "Harmonic",
      "Harmonic",
      "Harmonic",
      "Harmonic",
      "Harmonic",
      "Harmonic",
      "Harmonic",
      "Harmonic"
    ],
    "tideHeight": [
      0.7,
      -0.1,
      0.7,
      -0.1,
      0.7,
      -0.1,
      0.6,
      -0.1
    ],
    "tideId": [
      1,
      2,
      3,
      4,
      5,
      6,
```

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      7,
      8
    ],
    "tideType": [
      "H",
      "L",
      "H",
      "L",
      "H",
      "L",
      "H",
      "L"
    ],
    "validTimeLocal": [
      "2016-11-30T22:01:00-0600",
      "2016-12-01T09:00:00-0600",
      "2016-12-01T22:36:00-0600",
      "2016-12-02T09:43:00-0600",
      "2016-12-02T23:12:00-0600",
      "2016-12-03T10:23:00-0600",
      "2016-12-03T23:48:00-0600",
      "2016-12-04T10:58:00-0600"
    ],
    "validTimeUtc": [
      1480564860,
      1480604400,
      1480653360,
      1480693380,
      1480741920,
      1480782180,
      1480830480,
      1480870680
    ]
  }
}
```